REMARKS

Rejections Under 35 USC §102 and 35 USC §103

Claims 21, 23-25, 27, 28, 30-32, 34, 35, 37, 38 and 40 have been rejected under 35 USC 102(b) as being anticipated by Suyama et al. (US Patent No. 5,317,255).

Claims 22 and 29 have been rejected under 35 USC 103(a) as being unpatentable over Suyama et al. (US Patent No. 5,317,255) in view of Gleason et al. (US Patent No. 5,914,613).

Claims 26 and 29 have been rejected under 35 USC 103(a) as being unpatentable over Suyama et al. (US Patent No. 5,317,255) in view of Ohno (US Patent No. 5,631,573).

Claim 33 has been rejected under 35 USC 103(a) as being unpatentable over Suyama et al. (US Patent No. 5,317,255) in view of Yamaguchi (US Patent No. 5,422,579).

Claim 36 has been rejected under 35 USC 103(a) as being unpatentable over Suyama et al. (US Patent No. 5,317,255) in view of Ference et al. (US Patent No. 5,926,029).

The rejections under 35 USC §102 and 35 USC §103 are traversed for the reasons to follow. However, the claims have been amended to emphasize additional features, which further distinguish the claimed method from the prior art.

Summary of the Invention

Claims 21-40 are directed to a method for testing a semiconductor component 10A (Figure 2A) having a plurality of terminal contacts 12A (Figure 2A). The method includes the step of providing a board 18 (Figure 2A) comprising a plurality of contacts 20 (Figure 2A) in electrical communication with test circuitry 22 (Figure 2A). The

method also includes the step of providing a substrate 26 (Figure 2F) having a plurality of movable test contactors 32 (Figure 2F) comprising first contacts 34 (Figure 2F) including first conductive polymer layers 44 (Figure 2F) configured to electrically engage the terminal contacts 12A (Figure 2C), and second contacts 38 (Figure 2F) including second conductive polymer layers 46 (Figure 2F) in electrical communication with the first contacts 34 (Figure 2F) and configured to electrically engage the contacts 20 (Figure 2F).

The method also includes the steps of placing the component 10A (Figure 2A) on the substrate 26 (Figure 2F) with the terminal contacts 12A (Figure 2C) in electrical communication with the first contacts 34 (Figure 2C) and the second contacts 38 (Figure 2C) in electrical communication with the contacts 20 (Figure 2F). The method also includes the step of applying test signals through the test contactors 32 (Figure 2F) and the terminal contacts 12A (Figure 2C) to the component 10A (Figure 2A).

Argument

Independent claim 21 has been amended to recite "each first contact and each second contact comprising a separate flexible segment of the substrate having a first conductive polymer layer and a second conductive polymer layer on opposing sides thereof". Independent claims 27 and 32 have also been amended to include "separate flexible segments of the substrate" recitations.

The separate flexible segment 54 of the substrate 26 is shown in Figure 2F. In addition, antecedent basis for the "separate flexible segment" recitation is contained on page 13, lines 15-23 of the specification. Antecedent

basis for the "opposing sides" recitation is contained on page 11, line 18 of the specification.

In Suyama et al. the substrate 92B does not include separate flexible segments. In addition, the conductive sheets 92A and 9C are not on opposing sides of separate flexible segments. Rather, pins (Figure 7) in openings in the substrate 92B (Figure 7) are taught by Suyama et al. Further, sheets 92A, 92C (Figure 7) of a conductive polymer are taught by Suyama et al., rather than conductive polymer layers on separate flexible segments of the substrate, as in the present method.

One advantage of the present method is that the contactors 32 (Figure 2F) can move independently of one another during performance of the method. This helps to accommodate variations in the size and planarity of the terminal contacts 12A (Figure 2A). To emphasize this feature of the method, independent claim 21 has been amended to recite "the test contactors moving independently" during the placing step. Independent claims 27 and 32 have also been amended to include "move independently" during the placing step recitations. Antecedent basis for this recitation is contained on page 13, line 21 of the specification.

Gleason et al. was cited as teaching a "grooved contact support structure to allow adaptation to contact height differences". However, the contacts 88 (Figure 8) in Gleason et al. rather than being on separate flexible segments of a substrate, are all on the same substrate (elastomeric layer 98-Figure 8). With the Gleason et al. contacts 88, movement of one contact 88 causes an adjacent contact 88 to also move. In this regard, please note Figure 10c of Gleason et al., wherein adjacent contacts 88

appear to move together in opposite directions, rather than independently of one another.

With the added recitations, the amended claims are submitted to be novel over Suyama et al., as this reference does not disclose or suggest these features. Further, the amended claims are submitted to be unobvious over Suyama et al. and Gleason et al., unobvious over Suyama et al. and Ohno, unobvious over Suyama et al. and Yamaguchi, and unobvious over Suyama et al. and Ference et al., as these combinations of references also do not disclose or suggest these features.

Conclusion

In view of the amendments and arguments, favorable consideration and allowance of claims 21-40 is respectfully requested. Should any issues arise that will advance this case to allowance, the Examiner is asked to contact the undersigned by telephone.

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